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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/076,759	02/14/2002	Enrique Martinez Force	ARNO118342	2390
26389	7590	06/10/2004	EXAMINER	
CHRISTENSEN, O'CONNOR, JOHNSON, KINDNESS, PLLC 1420 FIFTH AVENUE SUITE 2800 SEATTLE, WA 98101-2347			MCELWAIN, ELIZABETH F	
			ART UNIT	PAPER NUMBER
			1638	

DATE MAILED: 06/10/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/076,759

Applicant(s)

MARTINEZ FORCE ET AL.

Examiner

Elizabeth F. McElwain

Art Unit

1638

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 14 February 2002.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 13-15 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 13-15 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

The amendment filed February 14, 2002 has been entered.

Claims 1-12 and 16-23 have been cancelled.

Claims 13-15 are newly amended.

Specification

The amendment of the specification to claim priority to U.S. Application No. 09/326,500 is noted. However, it is required that the status of the application is set forth. The specification must be amended to recite that said application is "now U.S. Patent 6,348,610".

Information Disclosure Statement

1. The information disclosure statement (IDS) submitted on February 14, 2002 has been considered.

Claim Rejections - 35 USC § 112

2. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

3. Claim 15 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.
4. Claim 15 is indefinite in that it recites "crossing sunflower seeds", since plants can be crossed. However, seeds cannot be crossed without first being grown into plants.

5. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

6. Claims 13-15 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention.

The claims are drawn to sunflower seeds comprising sunflower oil that has an oleic acid content of more than 5% and less than 65%, a linoleic acid content of more than 1% and less than 65%, a palmitic acid content of more than 20% and less than 40%, a stearic acid content of more than 3% and less than 15%, a palmitoleic acid content of less than 4% and asclepic acid content of less than 4%. However, the specification only discloses the fixed homozygous line QQ-3598-M having an oleic acid content of 47.2%, a linoleic acid content of 6.7%, a palmitic acid content of 30.5%, a stearic acid content of 9.6%, and 1.1% or less of other minor fatty acids. In addition, the specification only discloses one method of deriving said line, which requires the mutant sunflower line IG-1297M crossed with the mutant sunflower line CAS-3 and then subsequent self-fertilization and selecting progeny. Therefore, said two mutant sunflower lines are required to practice the claimed invention.

Since the seeds and plants required by the claims are essential to the claimed invention, they must be obtainable by a repeatable method set forth in the specification or otherwise be readily available to the public. If a plant is not so obtainable or available, the requirements of

35 U.S.C. 112 may be satisfied by a deposit thereof. The specification does not disclose a repeatable process to obtain the exact same seed or plant in each occurrence and it is not apparent if such a plant or seed is readily available to the public. It is noted that applicants have deposited seeds for IG-1297M and CAS-3 under the depository accession numbers: ATCC-209591 and ATCC-75968, *but there is no indication in the specification as to public availability.* **If the deposit of these seeds is made under the terms of the Budapest Treaty, then an affidavit or declaration by the applicants, or a statement by an attorney of record over his or her signature and registration number, stating that the seeds will be irrevocably and without restriction or condition released to the public upon the issuance of a patent would satisfy the deposit requirement made herein.** A minimum deposit of 2500 seeds is considered sufficient in the ordinary case to assure availability through the period for which a deposit must be maintained.

If the deposit has not been made under the Budapest Treaty, then in order to certify that the deposit, meets the criteria set forth in 37 CFR 1.801-1.809, applicants may provide assurance of compliance by an affidavit or declaration, or by a statement by an attorney of record over his or her signature and registration number showing that

(a) during the pendency of the application, access to the invention will be afforded to the Commissioner upon request;

(b) all restrictions upon availability to the public will be irrevocably removed upon granting of the patent;

(c) the deposit will be maintained in a public depository for a period of 30 years or 5 years after the last request or for the enforceable life of the patent, whichever is longer;

(d) the viability of the biological material at the time of deposit will be tested (see 37 CFR 1.807); and

(e) the deposit will be replaced if it should ever become inviable.

In addition, if the deposit requirement is met, then the claims are enabled only for sunflower seeds that are produced as a result of a cross between plants grown from the deposited seeds IG-1297M and CAS-3, and having an oleic acid content of 47.2%, a linoleic acid content of 6.7%, a palmitic acid content of 30.5%, a stearic acid content of 9.6%, and 1.1% or less of other minor fatty acids. The specification does not teach any other methods for producing a sunflower seed having this combination of fatty acids. In addition, the specification does not teach any other sunflower seeds that have other combinations of fatty acids that fall within the broad ranges that are claimed. It is highly unpredictable that one skilled in the art would be able to practice the claimed invention without using plants grown from the deposited seeds IG-1297M and CAS-3, given that these lines were produced by random and individual mutations, and it is also highly unpredictable that these crosses will produce seeds having fatty acid compositions that cover the broad ranges that are claimed.

Given the high level of unpredictability of crossing sunflower plants to produce plants having specific ranges of percentages of fatty acids that are specified for six fatty acids in view of the high level of unpredictability inherent in plant breeding and particularly to get a seed having oil that has fatty acid levels falling within all six ranges; given the lack of working examples of plants producing seeds with fatty acid levels falling within the claimed ranges other than that of QQ-3598-M; given the absence of guidance with regard to other methods of producing a sunflower seed having fatty acids that fall within the claimed ranges and enable the

Art Unit: 1638

claimed ranges; and given the breadth of the claims which covers very broad ranges of oleic, linoleic, palmitic and stearic acids; and given that the prior art does not teach sunflower seeds having oil with the claimed properties; it would require undue experimentation to make and/or use the claimed invention as broadly claimed and without fulfillment of the deposit requirements.

No claims are allowed.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Elizabeth F. McElwain whose telephone number is (571) 272-0802. The examiner can normally be reached on increased flex time.

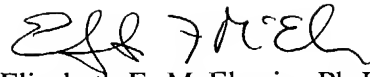
If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Amy Nelson can be reached on (571) 272-0804. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Application/Control Number: 10/076,759

Page 7

Art Unit: 1638

A handwritten signature in black ink, appearing to read 'El F McEl'.

Elizabeth F. McElwain, Ph.D.

Primary Examiner

Art Unit 1638

EFM